EFFECTIVENESS OF COMMUNICATION BOARD ON COMMUNICATION PATTERN AND LEVEL OF SATISFACTION AMONG MECHANICALLY VENTILATED PATIENTS AT KMCH, COIMBATORE

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A DISSERTATION SUBMITTED TO THE TAMILNADU Dr. M. G. R MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT OF REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

APRIL 2012

CERTIFICATE

This is to certify that the Dissertation entitled **EFFECTIVENESS OF COMMUNICATION BOARD ON COMMUNICATION PATTERN AND LEVEL OF SATISFACTION AMONG MECHANICALLY VENTILATED PATIENTS AT KMCH,COIMBATORE ,** is submitted to the faculty of Nursing, **The Tamilnadu Dr. M.G.R Medical University, Chennai by Mr.Jophy John,** in partial fulfillment of requirement for the degree of Master of Science in Nursing. It is the Bonafide work done by him and the conclusions are his own. It is further certified that this dissertation or any part thereof has not formed the basis for award of any degree, diploma or similar titles.

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CHAPTER 1

INTRODUCTION

"It is the responsibility of the health care practitioners to assess and determine an effective means for their patient's ability to communicate while they are verbally unable to do so"

- *Lance Patak*

A communication act is a unit of communicative behavior, nonvocal or verbal, that is directed from one conversational participant to another in an attempt to convey a message. An exchange is a group of communication acts related to the communication of a single idea. Interpersonal communication is considered to be a fundamental human behavior necessary for normal psychosocial functioning. (Happ, 2011)

Nurse-patient communication is essential to the development and function of a therapeutic relationship. Unfortunately, critically ill patients who are treated with mechanical ventilation unable to communicate due to experience of fear, panic, and insecurity. The good news is that nurses are asking patients about pain and engaging in communication with the patients about pain. Unfortunately, these communication exchanges are often unclear and unresolved. Breakdowns occur when patients become confused with or inattentive to the nurses' queries about symptoms of pain and when nurses have difficulty interpreting patients' responses.(Haljamae,1989)

Communication difficulties are often experienced by intubated patients and the critical care staffs who manage them.Endotracheal tubes becomes a hurdle for the patient as it prevents them to communicate verbally. Usually this is due to the placement of the tube in the throat, which prevents passage of air across the vocal cords.Inspite of their inability to produce speech, these patients are often keen to communicate effectively via other methods. The intubated patients normally rely on communication methods like gestures, head nods, mouthing of words and writing. This is specially focused to enhance the basic needs related to physical comfort such as positioning and suctioning.(Grossbach,2011)

Convincingly, communication difficulties create stress for patients treated with mechanical ventilation. It results to psycho emotional distress, including indications of depression ,anxiety, fear and anger,frustration,panic,loss of control and decreased self esteem. In addition psycho emotional distress causes pain or discomfort which usually associated with suctioning, sleep disturbances, breathing difficulty and difficulty in swallowing (Khalaila, 2011)

Voicelessness, is a result of respiratory tract intubation or cognitive, sensory, or language deficits among mechanically ventilated patients. Nonvocal behaviors are the principle means of communication used by critically ill adults. However, nurses do not typically receive training in nonvocal communication techniques. Most patients receiving mechanical ventilation experienced a moderate to a high level of frustration when communicating their needs. Patients may become anxious when their needs are not met during periods of mechanical ventilation because of their inability to verbally communicate with family and health care providers. Anxiety and frustration build and contribute to the negative emotions and feelings of dependency, dehumanization, and futility (Carroll , 2004).

Essentially, optimal communication must be maintained between nurses and patients receiving mechanical ventilation. Many a time the nurses could not maintain an effective patient communication. It has been identified that numerous hurdles in nurses communication with patients receiving mechanical ventilation. It includes difficulty in lip reading, patients inability to write, increased workload and nurses perceived insecurities.(Happ,2011)

Critically ill patients on mechanical ventilation in intensive care units often feel high levels of frustration in communicating their needs to their caregivers. Mechanically ventilated patients experience an intensified need to communicate. But it often compromised as their condition prevents speech. Lack of ability to communicate with care providers and family during periods of mechanical ventilation results in high-risk situations and increases patient anxiety and frustration because life-threatening needs may not be met. Also, when patients cannot respond, communication between patients and caregivers is usually limited to short-term information related to physical care in the form of yes/no questions or commands.(Ashworth P,1980)

NEED FOR THE STUDY

Mechanically ventilated patients are unable to express their feelings and needs through verbal communication because the endotracheal tubes running through their vocal cords make speech impossible, contributing to their frustration and anxiety. As a result, the caregiver is forced to interpret the patients' non-verbal communication such as mouthing, gesticulating, nodding and writing — which can be difficult for the critically ill patient. Nearly 40% of seriously ill patients who die in hospitals spend their last days and hours in medical intensive care receiving mechanical ventilation. Many patients die in pain without the ability to fully express their needs, wishes about end-of-life care, or final messages to loved ones and the intubated patients, those who are the most severely ill have the greatest anger about the inability to speak.(Rivero,2006)

Patients with critically ill experience overwhelming communication problems caused by intubation that distance the patients from caregivers and loved ones. Mechanical ventilation and use of paralytic and sedative agents impair communication between patients and others. Physical restraints used to prevent disruption of medical devices further limit patients' ability to gesture or use alternative communication techniques. The inability to speak during critical illness is a source of distress for patients, yet nurse-patient communication in the intensive care unit has not been systematically studied or measured.(Happ, 2004)

The patient was usually associated with feelings of stress, reluctance to persevere, and resulted in minimizing or avoiding interaction in terms of communication failure or frustration. Critical care nurses interpret the factors such as knowing the patient, the patient's ability to interact and use assistive communication devices, and family presence to improve communication with mechanically ventilated patients.(Happ, 2001)

In the last 20 years, research studies related to mechanical ventilation have focused on the experiences of the patient and his or her communication with the health care practitioner. First, the experiences of patients who required mechanical ventilation were explored in 3 qualitative studies. The researcher interviewed 12 participants who were intubated and mechanically ventilated from 2 to 8 months in intensive care unit (ICU) . All were initially orally or nasally intubated, and 4 required a tracheostomy at a later time. From the interviews, the researcher identified patients

experiencing frustration, anger, fear, and anxiety in their failure to communicate by mouthing words, using gestures, or writing. Patients reported that their attempts to communicate were interpreted by health care providers as apprehension and thus frequently resulted in communication failure.(Patak,2004)

Nonverbal methods not only require energy but are tiring and emotionally draining for the mechanically ventilated patients. The use of communication board as an intervention to enhance communication has been proposed by many health care practitioners (Martensson & Fridlund, 2002; Happ, 2001; Adomat & Killingworth, 1994; Williams, 1992). Literature review supports health care practitioner to use the communication board in facilitating communication in mechanically ventilated patients. However, limited research exists on the patient's perception of the helpfulness of the communication board.Furthermore, research studies have not yet reported the actual level of frustration experienced by mechanically ventilated patients. Therefore, research is needed to investigate the level of frustration. Factors identified by critical care nurses as limiting their communication with intubated patients include: heavy workload, patient's severity of illness, difficulty in lip reading, patient's inability to write, preoccupation with physical or technical aspects of care, personality of the patient, and lack of appropriate communication skills training.

During the clinical postings, the investigator witnessed a situation where the patient found difficult to communicate with the nurse. The situation was so disheartening as the patient couldn't express or convey the messages as they wish. These kinds of situations would definitely bring down the patients satisfaction over communication between themselves and staff nurses. Since then, the investigator felt the need for having a communication system for the mechanically ventilated patients to aid them to express the wishes to the health care team members. Effective communication aids can bring back the satisfaction of patients over communication pattern. Hence the investigator decided to find out whether the communication board has the potential to improve communication and satisfaction among mechanically ventilated patients.

STATEMENT OF THE PROBLEM

Effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients at KMCH,coimbatore.

OBJECTIVES

The objectives of the study were to:

- asses the communication pattern and level of satisfaction among mechanically ventilated patients, who use communication board and those who do not use communication board.
- compare the effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients, who use communication board and those who do not use communication board.
- find out the correlation between communication pattern and level of satisfaction among mechanically ventilated patients.

OPERATIONAL DEFINITIONS

Communication board

Communication board called vidatak EZ board refers to display board which consist of pictures representing the basic needs, wants and pain charts. The board was patented in the United States in 1999. It is used to improve the communication between nurse and patient.

Communication pattern

It refers to the way of exchanging message between mechanically ventilated patients, nurses and investigator. Communication pattern scale was developed by the investigator which consisted of patient response and staff response. The patient response was assessed by the investigator and the staff response was assessed by themselves.

Level of Satisfaction

It refers to the feeling of happiness expressed by the ventilated patients for fulfilling his/her needs and wants after extubation which was measured by satisfaction scale developed by the investigator.

HYPOTHESIS

There is significant difference in communication pattern and level of satisfaction between mechanically ventilated patients, who use communication board than those who do not use communication board.

ASSUMPTION

Mechanically ventilated patients have problems in verbal communication.

CONCEPTUAL FRAMEWORK

Conceptual framework for this study was developed on the basis of Modified King ‘s goal attainment theory. This was developed by Imogene King (1981).

Kings theory of goal attainment focuses on the relationship between nurse and the patient. Kings theory explains how the nurse – patient relationship can influence goals that are set and their level of achievement. She describes a situation in which two people, usually strangers, come together in a health care organization to help or be helped to maintain a state of health.

According to King, perception is a process in which data obtained through senses and from memory are organized, interpreted and transformed, which are related to past experience, concept of self and educational background. Individuals come together for a purpose, each person makes a judgment, takes mental or physical action and reacts to other individuals and the situations. Interactions are defined as the observable behavior of two or more persons in mutual presence. Transaction is defined as observable behavior of human beings, interacting with environment. When interaction occurs goals are attained.

The present study based on Modified Imogene Kings goal attainment transaction model focuses on interpersonal relationship between the patients and the nurse and this interaction is influenced by the perception from both the patients and the nurse. The investigator and intubated clients perceived the need of improving communication. Both the investigator and intubated patients make the judgment and set the goal to improve communication pattern between nurse and the patient by using the communication board.

During the reaction phase, the investigator taught the staff about the way of using the communication board and regarding the responses to be given back to the patient. During the interaction phase, the investigator assessed the effectiveness of communication board by patient response, staff response, and level of satisfaction. By implementing the communication board, the investigator, nurse and intubated patients enter into transaction phase.

In the present study, in transaction phase the mechanically ventilated patients improved communication pattern and level of satisfaction than the control group.

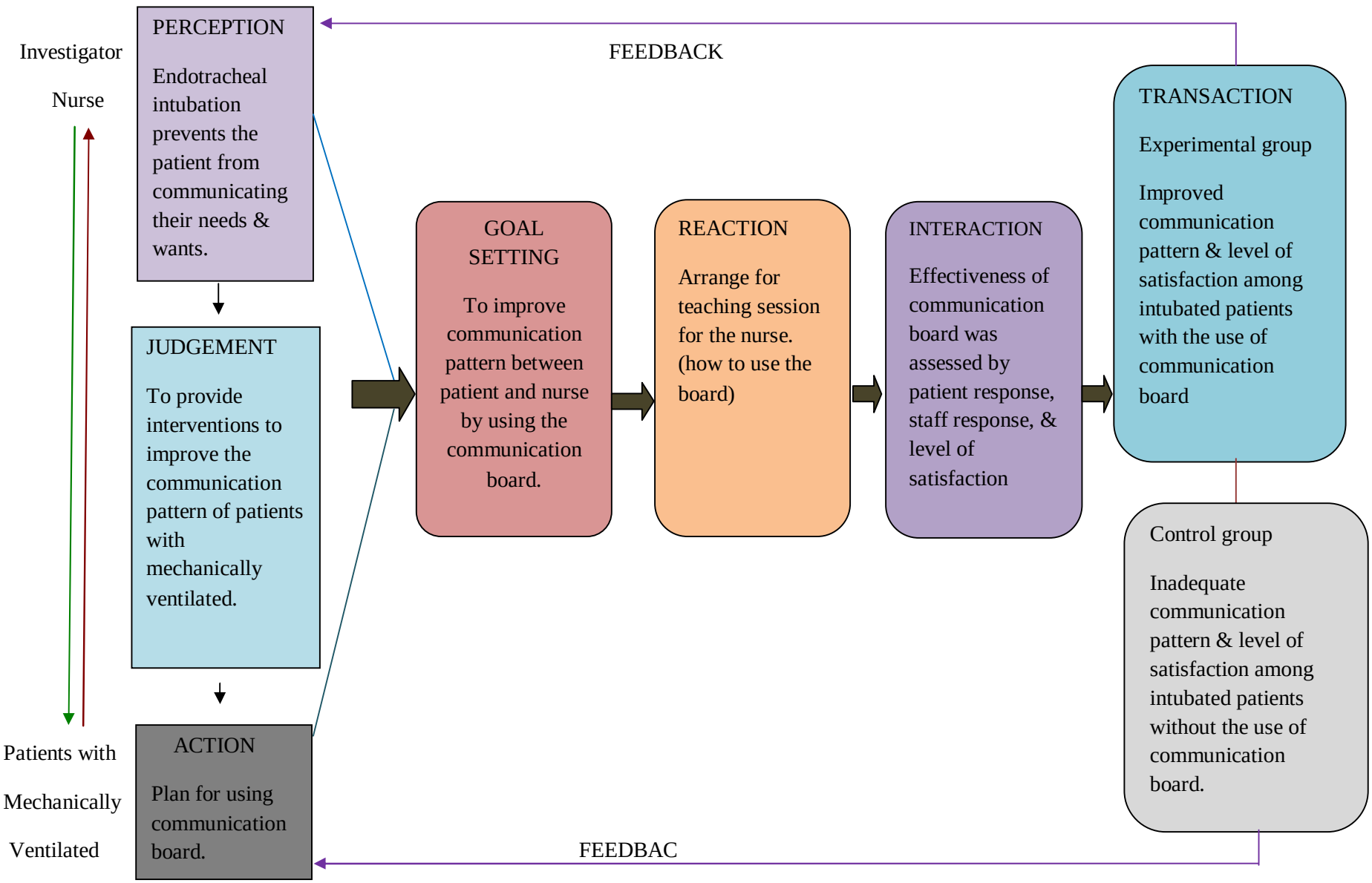

Fig 1: Conceptual framework based on Modified King's Goal attainment transaction model

CHAPTER II

REVIEW OF LITERATURE

A review of literature is an essential aspect of scientific research.Infact, it provides room for the researcher to be familiarized with the existing studies and moreover helps to focus on a particular problem and lay a foundation for new knowledge.

The related literature reviewed is presented as follows:

Section A : Review of literature related to communication pattern and problems of mechanically ventilated patients.

Section B : Review of literature related to communication pattern and problems as observed by nurse who nursed the patients with mechanically ventilator support.

Section C : Review of literature related to the effectiveness of communication aids in mechanically ventilated patients.

Section A :Review of literature related to communication pattern and problems of mechanically ventilated patients

Liu, (2009) conducted a study on Basic needs and their predictors for intubated patients in surgical intensive care units. The main aim of the study was to find out the basic needs and communication difficulties of intubated patients in SICUs and to identify predictors of the basic needs from the patient characteristics and communication difficulties. This study was done by descriptive correlation method. Data were collected from 80 patients in SICUs over three structured questionnaires which include demographic information, scale of basic needs and scale of communication difficulties. The result was, the intubated patients were found to have communication difficulties. The sense of being loved and belonging was the most common need in the intubated patients studied. Positive correlation was significantly found between communication difficulties and general level of basic needs (r=.53&p<.01), and another positive correlation was found between the length of stay in ICUs and the need for love and belonging (r=.25&p<.03).

Caroll,2004) performed a study on non –vocal ventilated patient's perceptions of being understood. The aim of the study was to interpret and understand the non-vocal mechanically ventilated patients' experiences with communication. This study was done by Meta analysis. Totally 111 participants and they were divided into two groups. The first group categorized as the characteristics of non –vocal ventilated patients communication experiences. Non-vocal individuals reported that, they were often not understood, which resulted in loss of control and negative emotional responses. The second group was categorized as the kind of nursing care desired by non-vocal patients. Non-vocal patients wanted nursing care that was delivered must be an individualized, caring manner. This would facilitate positive interpersonal relations between the patient and the nurse.

Mc Cabe,(2004) conducted a study on nurse –patient communication and exploration of patient experiences. The aim of the study was to explore and produce statements relating to patients experiences on nurse's communication. A qualitative perspective using a phenomenological qualitative approach was considered in this study. By using purposeful sampling, 8 patients were interviewed. Data were collected by using unstructured interviews. The findings of the study were the nurse can communicate well with patients when they use a patient centered approach to improve the quality patient care. The study was concluded that the patients were found a bit difficult to communicate through non-verbal communication while on mechanical ventilator.

Rotondi,(2002) found that patients recollections of stressful experiences while receiving prolonged mechanical ventilation in an ICU.The objective was to describe stressful experience of adult patient who received mechanical ventilation more than 48 hours in an ICU.The study design was prospective cohort study. They used a 32 item questionnaires to collect the data on patients stressful experiences both psychological and physical associated with the mechanical ventilation.154 patients who were intubated in an ICU were selected. Moreover the patients selected were oriented to person, place, and situations. The patients selected found to be moderately to extremely bothersome were pain ,fear,anxiety,lack of sleep, feeling of tense, inability to speak, lack of control, nightmares and loneliness.

Grazina, (2001) performed the study on communication between nurse and patient during mechanical ventilator treatment. The main aim of the study was patient experience of communication problem during ventilator.22 patients treated in ICU were interviewed 3 times over 2 months period about their experiences of changes to their communication during ventilator. Structured questionnaire includes open ended questions were used on each occasion. The registered nurse in charge of each patient evaluates the extent of communication during the ventilator. Out of 22 patients, 13 patients reported that the registered nurses were able to understand their needs and wishes during the ventilator treatment but others were unhappy with the communication pattern on mechanical ventilation. The result suggested the need for detailed examination of patients' potential for effective communication. Evaluation of the communication skills of the registered nurse and further investigation of devices that can help facilitate communication during ventilator treatment must be looked upon.

Hafstiendottir, (1996) conducted a study on patients experiences of communication during the mechanical ventilator. The aim of the study was to find out the patients experiences of communication during the ventilator in the ICU. Data collected from eight individuals through an audio tape recorded, open interviews. The subjective experiences on communication described were analyzed phenomenologically.The results were categorized into four groups, namely the patients' experiences of communication during the ventilator, problems of communication experienced, additional problems of communication experienced and nursing interventions experienced. However, the categories of the patients' experiences of communication and problems of communication were only reported. The patient's experience of communication was generally described as negative as it evokes various negative emotions, and sometimes they had the feeling of giving up. Participants generally described being tired or exhausted during the intubation period. They emphasized the importance of the information and explanation provided by the nurses. Also, the presence and support provided by family members was also valuable to them.

Section B: Review of literature related to communication pattern and problems as observed by the nurses who take care of the patients with mechanical support

Finke, (2008) conducted a study on ―A systematic review of the effectiveness of nurse communication with patients with complex communication needs with a focus on the use of augmentative and alternative communication . The study aimed at regarding communication between nurses and patients with complex communication needs. To have an effective nurse-patient communication is critical to provide quality health care. Difficulties in communication between nurses and patients arise when patients are unable to speak. This problem is further complicated because nurses typically receive little or no training in how to use augmentative and alternative communication to communicate with patients with complex communication needs. So by using specific strategies like augmentative and alternative communication that nurses can improve and facilitate communication with each other when speech is not an option. Communication with all patients is very important to the provision of quality nursing care. Communication cannot always be achieved using the speech modality. Nurses need to have tools and skills that will allow them to communicate with all of their patients whether or not they can speak.

Hemsley,(2001) carried out a study on ―Nursing the patient with severe communication impairment . The researcher interviewed 22 nurses from four hospitals in Sydney, Australia, who had experience of patients with severe communication impairment. The aim of the study was to recognize the successes and obstacles the nurse encountered during communication pattern. In half of the interview responses, it was found that inappropriate access to proper communication aids as a major setback in interacting with the communication impaired patients. So the nurses emphasize the importance of communication systems in the hospitals. Proper communication system seemed to curtail the amount of time and effort spent on communication. On its absence it can definitely lead to considerable frustration for nurses and patients.

Hall, (1996) performed a study on interactions between nurses and patients on ventilator. The objective of the study was to examine the interactions between nurses and patients on ventilator and the relationship between the characteristics of these nurses and their communication with patients. An analytical, cross-sectional, experimental design was used to examine the work experiences of 30 nurses with ventilated patients. The perceived level of consciousness of their ventilator patients and

the action and reactions of the nurses in relation to these patients. Findings suggest that nurse's perceptions of patient's responsiveness and length of time nurse care for patients will influence nurse patient interaction. The nurse spend more time providing patient with information that the nurses consider important rather than assessing (or) responding to patients needs.

Bergbon, (1993) conducted a study on the communication process with ventilation patients in the ICU as perceived by the nursing staff.27 ICU nurses were interviewed about their experiences and opinions of the communication process with ventilator treated patients. The main aim of the study was to explore the staff nurses experiences while cared with mechanical ventilator patients. Data were collected through interview. The findings shows that nurse with limited ICU experiences considered the initial contact with new critically ill ventilated patients more frustrating than experienced nurses. For nurses with an ICU stress was more commonly evoked by the presence of worried and anxious relatives and by the feeling that something was wrong with the patients but they were unable to identify the problem.

Section C: Review of literature related to the effectiveness of communication aids among mechanically ventilated patients

Reed, (2008) performed the study on the role of education and innovative communication tools in improving non-verbal communication. She surveyed nurses and patients regarding methods used to communicate .Pre –intervention assessments reported 60% of mechanically ventilated patients extremely frustrated with their inability to communicate and 75% of nurses perceived their methods and resources to be inadequate. Post –intervention assessment reported 51% of patients preferred the communication board as their best method compared to other communication aids and basic methods, and 58% of nurses reported the EZ board as the most beneficial method

Laura,(2007) conducted a study on picture boards help patients communicate ailments to nurses. The main purpose of this study was to reduce communication barriers between health care professionals and patients. The investigator distributed more than 2200 boards to facilitate across the state in its efforts to ensure that every patient receives effective medical care. The article strongly advocates the use of communication boards, stating that they become an integral part of the communication in patients who are unable to speak.

Annie, (2007) conducted the study on effectiveness of a communication board against the usual methods of communication used by the mechanically ventilated patients. She performed an experimental control trial of 60 patients, randomized to use the communication board. The results of the study demonstrated that 73% patients without the communication board found their communication process was inadequate. However with the board 80% found their communication was adequate. Of those who used the communication board,80%were satisfied with the board,20% moderately satisfied and none reported unsatisfied. Nurses however, reported 53% satisfaction, 30% moderately satisfied and 17% unsatisfied. Overall, the patients with the vidatak EZ board reported higher satisfaction with communication ($p<.007$) and this was correlated to their satisfaction with the communication board ($p<.01$).

Patak ,(2006) conducted a study on communication boards in critical care patients views. The study found to determine the perceived level of frustration of patients receiving mechanical ventilation while they attempt to communicate .The descriptive approach was used and samples involved 29 critically ill patients were suppose to extubate within the past 72 hours. Subjects participated in a 20-60minute audio –taped interview consisting of questions about their perceived level of frustration when communicating with and without a communication board and their thoughts about the appropriate content and format of board.62 patients reported a high level of frustration in communicating their needs while receiving mechanical ventilation. Patients judged that their perceived level of frustration in communicating their needs would have been significantly lower($p<007$)if a communication had been offered than if not.69% of the patients perceived that a communication board would have been helpful, and they also identified specific characteristics and content for a communication board. So a communication board may be an effective intervention for decreasing patients' frustration and facilitating communication.

Happ,(2004) conducted a study on Electronic-voice output communication aids for temporarily non speaking patients in MICU.The purpose of the study was to describe the characteristics of intubated MICU patients who use voice-output communication aids ,the usage patterns like message categories,frequency,assistance required, communication quality and barriers to communication with voice –output communication aids. The participant observation ,semi structured interviews, questionnaires and clinical record review in a complementary design are used to obtain data on communication events and voice-output communication aids .The study

participants were,45.5±16.0 years of age with 13±1.9 years of education and moderately severe illness(27.5±16.1),used the voice –output communication aids for 5.7±4.6 days. Ease of communication scale measurements showed significantly less difficulty with communication after device use (p=.047).Almost half of the participants demonstrated some independent use of the device.

CHAPTER III

METHODOLOGY

This chapter deals with research design, variables under study, settings of the study,population,criteria for sample selection, sample size, sampling technique, description of the tool, pilot study, reliability of the tool, procedure for data collection and data analysis.

RESEARCH DESIGN

The research design adopted for the study was post test only quasi- experimental research design.

E X O_1

C O_2

O_1 - Post test assessment of patient with communication board

O_2 - Post test assessment of patient without communication board

VARIABLES UNDER STUDY

Communication board was the independent variable and communication pattern and level of satisfaction were the dependent variables.

SETTINGS OF THE STUDY

The study was conducted in the ICUs of KMCH at Coimbatore. It is a 800 bedded multispecialty hospital with various specialties like cardiology, neurology, orthopaedic, interventional radiology and oncology. The ICU consists of SICU, MICU, and CTU and most importantly all these ICUs are well equipped with modernized emergency interventions. These ICU s had a facility to accommodate 45 patients per day. Out of these, 30-50% of patients are mechanically ventilated. MAQUET and SERVO I are the ventilators and the selected ventricular modes such as pressure control, volume control and cpap with pressure support has been used to

treat mechanically ventilated patients.

POPULATION

All the conscious and oriented patients who were mechanical ventilated in MICU, SICU &CTU at KMCH were considered to be the population.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

- ✓ Patients who were conscious and oriented to person, place and time during mechanical ventilation on CPAP with Pressure Support mode.
- ✓ Patients who had requirement of mechanical ventilation from18-72 hours of intubation.
- ✓ Patients of age between 18 & 77 years

Exclusion criteria

- ❖ Patients who were mechanically ventilated through tracheostomy.
- ❖ Patients who were hemodynamically unstable at the time of Mechanical ventilation.

SAMPLE SIZE

The sample size was 30. First fifteen subjects assigned to the control group and the remaining 15 subjects considered to be the experimental group.

SAMPLING TECHNIQUE

The samples were selected using Non-probability purposive sampling for this study.

DESCRIPTION OF THE TOOL

This tool consisted of 4 sections;

Section-A Demographic profile

It includes age,gender,educational status and occupation.

Section-B Clinical profile

It includes disease condition, duration of mechanical ventilation, previous history of mechanical ventilation, length of ICU stay, day of intubation and day of extubation.

Section-C Communication pattern scale

The investigator prepared the tool after intensive review of related literature and prepared accordingly to suit the study. The maximum score for communication pattern scale was 30 and the least score was 0.It is a 3 point observational rating scale which consisted of 10 items for patient response and 10 items for staff response. It also contained 2 reversed score items.

SCORE INTERPRETATION

The scores were;

0 – Not at all

1 – Quite a bit

2 – moderately so

3 – Very much

LEVEL OF SATISFACTION SCALE

This includes assessing the level of satisfaction of patients on communication pattern.The maximum score for level of satisfaction was 60 and the minimum score considered to be 15.It is a 4 point likert scale which constituted of 15 items.Among the 15 items, 5 items scores are reversed.

SCORE INTERPRETATION

The scores were;

1 – Strongly disagree

2 – Disagree

3 – Agree

4 – Strongly agree

TESTING OF THE TOOL

Validity

The tools were given to experts in the field of nursing for content validity. All comments and suggestions considered and corrections were made and found to be valid.

Reliability

Brown split-half method is used for testing the reliability for communication pattern scale and level of satisfaction scale. Communication pattern scale constituted of patient response questionnaire and staff response questionnaire. The reliability for patient response and staff response are 0.77 and 0.85 respectively. The reliability for level of satisfaction scale is 0.83.

DESCRIPTION OF INTERVENTIONS

Communication board

On the front of the communication board, on the left side, is a box containing the letters of the alphabet and the numbers 0-9. It contained two folders on the right side with the headings ―I AM and ―I WANT, ―with descriptive words listed accordingly under each. On the back of the board to the left side have two drawings: one anterior view and one posterior view of an human body within a box entitled ―pain chart . To the right of the pain chart are descriptive expressions of physical experiences relating to parts of human body. In addition, to the right of those words is a vertical pain scale from 0-10.On the far right is a box which consisted of conversational phrases and

questions.

PILOT STUDY

The pilot study was conducted is to find out the feasibility and practicability of the study. It was conducted on 10 patients with duration of one-week in the ICUs. Among 10 patients, 5 patients assigned to control group and remaining 5 patients in experimental group.

PROCEDURE FOR DATA COLLECTION

The formal permission was obtained from the chairman and HOD of the ICUs by submitting an application to assure to abide the rules and regulations of the hospital.

The first step in selecting subjects for the study was the investigator reviewed patients' files to check factors such as demographic variable and duration of intubation to determine whether the patient had met inclusion criteria. Besides, the investigator discussed physical and psychological status with the nursing staff to see if the patients had any limitations with respect to cognition and emotional state.

Secondly, the investigator assessed the control group who received the standard care. In this regard , both the patients and the staff nurses response towards the conventional method was checked through communication pattern scale. In addition to this, the patients satisfaction over the communication pattern was checked through the level of satisfaction scale.Similarily, the same scale was used to assess the experimental group who received the communication board.

The data was collected as the investigator remained with the patient for 8 hours. During this period, the board was equally showed by both the nurse and the investigator as per the gestures evoked from the patient. Meanwhile the investigator observed the patient response towards the communication mode as it was performed by the staff nurse. The investigator used the observational rating scale to assess the patient response towards the communication mode. Subsequently, the nurses response over the effect of communication mode that they exercised was also assessed at the end of the day. This was done by the staff themselves by using the observational rating scale.

Later, after 24 hours of extubation the satisfaction level of patients over communication

mode was evaluated by using the likert scale. A time span of 30 minutes was taken by the patient to give scores for the 15 items of the scale.

Besides, the investigator collected feedbacks on communication board (experimental group) through 7 qualitative questionnaires. The questions was prepared accordingly to know the merits , demerits and suggestions to improve the communication board.This was given along with the satisfaction scale after 24 hours of extubation and the patient had taken 30 minutes for the completion.

STATISTICAL ANALYSIS

The collected data was analyzed by using both descriptive and inferential statistics. In the descriptive statistics percentage was used. Inferential statistics like independent t test and correlation were used.

CHAPTER IV.

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the description of demographic characteristics and clinical profile of the participants, analysis and interpretation of the data collected to evaluate the effectiveness of communication board among mechanically ventilated patients. The data collected was compiled, analyzed, and interpreted as follows.

SECTION A : Description of subjects based on the demographic variable

SECTION B : Description of subjects based on clinical profile

SECTION C : Description of subjects based on patient response, staff nurse response, and Level of satisfaction over communication pattern.

SECTION D : Comparison of patient response on communication pattern in Experimental and control group

SECTION E: Comparison of staff nurse response on communication pattern in experimental and control group .

SECTION F : Comparison of level of satisfaction on communication pattern in experimental and control group.

SECTION G: Correlation between patient response, staff nurse response and level of satisfaction over communication pattern.

SECTION A : Description of subjects based on the demographic variable

Table 1: Distribution of subjects according to demographic characteristics **N=30**

SL:NO	Demographic variables	Groups			
		Experimental n=15		Control n=15	
		f	%	f	%
1	**Age**				
	18-37	3	20	2	13
	38-57	7	47	10	67
	58-77	5	33	3	20
2	**Gender**				
	Male	13	87	12	80
	Female	2	13	3	20
3	**Education**				
	Secondary	6	40	5	33
	Higher secondary& above	9	60	10	67
4	**Occupation**				
	Employed	8	53	9	60
	Unemployed	7	47	6	40
5	**Diagnosis**				
	CAD	6	40	7	47
	RTA	3	20	2	13
	Mitral stenosis	2	13	2	13
	Laprotom	2	13	1	7
	Poisoning	1	7	2	13
	Oesophageal varices	1	7	1	7

Table 1 describes the distribution of subjects in experimental and control group according to age, gender, education, occupation and diagnosis.

Of the 30 subjects in the experimental group,47% belong to 38-57 years of age and 20% between 18and 37 years of age , where as 15 subjects in control group (67%) belong between 38 and 57 years of age and 13% belong to 18-37 years of age.

Considering the gender of subjects in experimental group 87% are the males and 13% are females. In control group 80% are males and 20% are females.

Regarding the educational status in experimental group,40% of the subjects had secondary education and 60% of the subjects were higher secondary & above. In control group 33% of the subjects had secondary education and 67% were higher secondary & above.

The most common primary diagnosis among the participants both in experimental & control group was coronary artery disease, that is 40% and 47% respectively.

SECTION B : Description of subjects based on clinical profile

Table 2 : Distribution of subjects according to clinical profile

SL.NO	Clinical Profile	Groups			
		Experimental		Control	
		F	%	F	%
1	**Duration of Mechanical ventilation**				
	18 hrs	8	53	9	60
	36 hrs	1	6	2	13
	54 hrs	4	27	2	13
	72 hrs	2	13	2	13
2	**Previously on Mechanical Ventilation**				
	Yes	1	7	1	7
	No	14	93	14	93
3	**Length Of ICU Stay**				
	2 days	6	40	6	40
	3 days	2	13	2	13
	4 days	5	33	5	33
	5 days	2	13	2	13

Table 2 describes the subjects according to the clinical profile. In the experimental group 53% and 27% received ventilator support for 18 hours and 54 hours respectively. In control group most subjects (60%) secured the ventilator treatment for 18 hours and the rest 39 %(13% each) of subjects received the ventilator treatment for 36hours, 54 hours and 72 hours respectively.

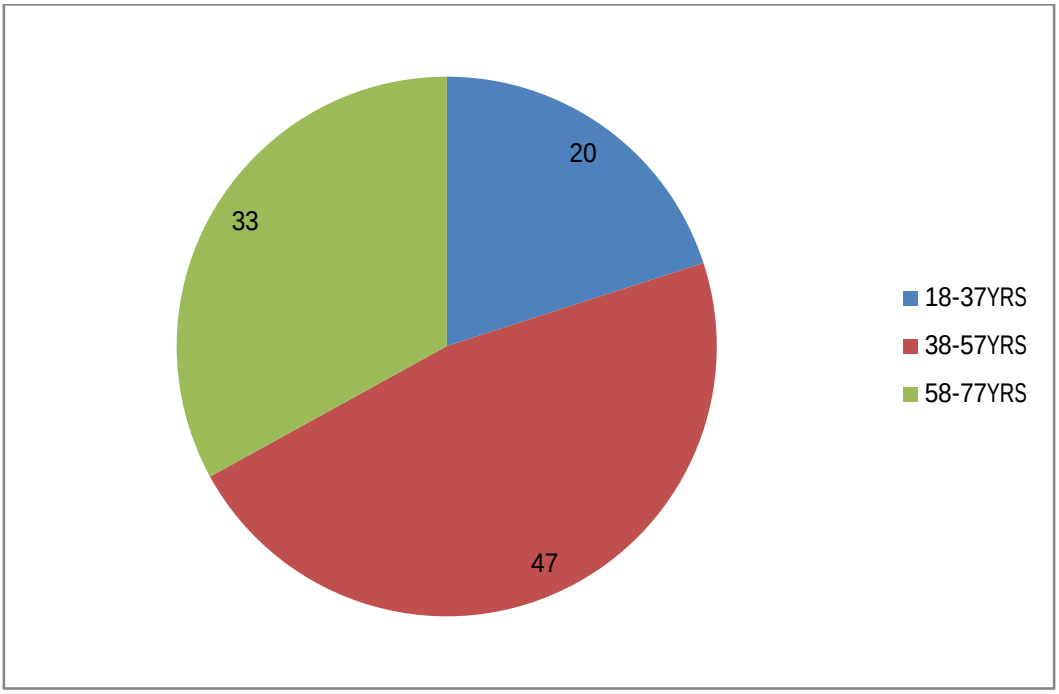

Fig. 2: Distribution of Subjects According to age in Experimental Group

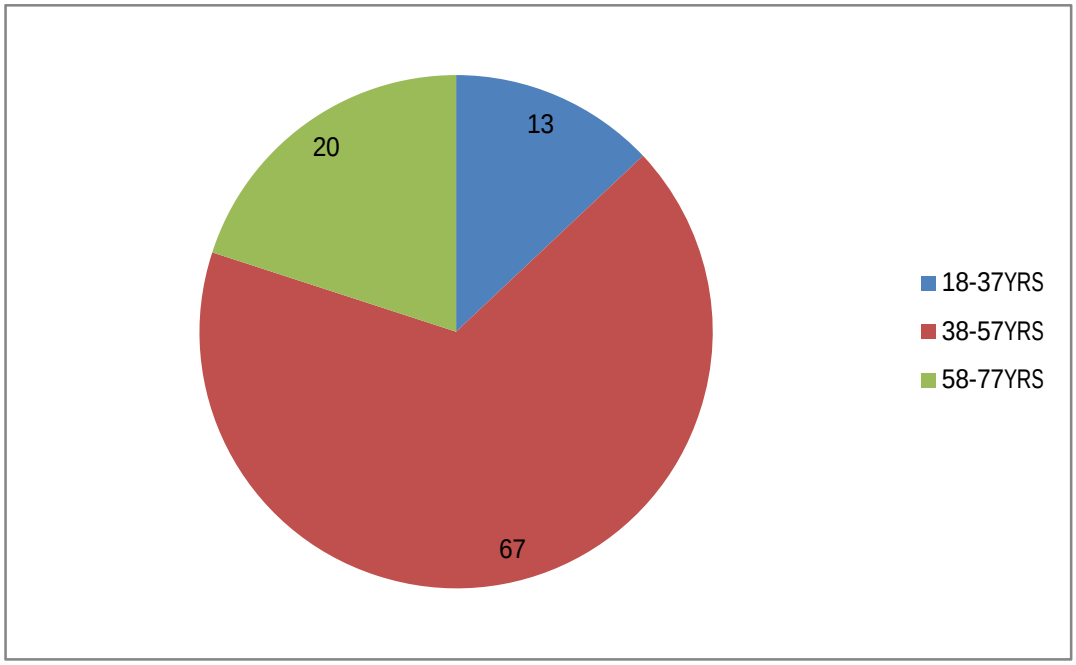

Fig.3: Distribution of Subjects According to age in Control Group

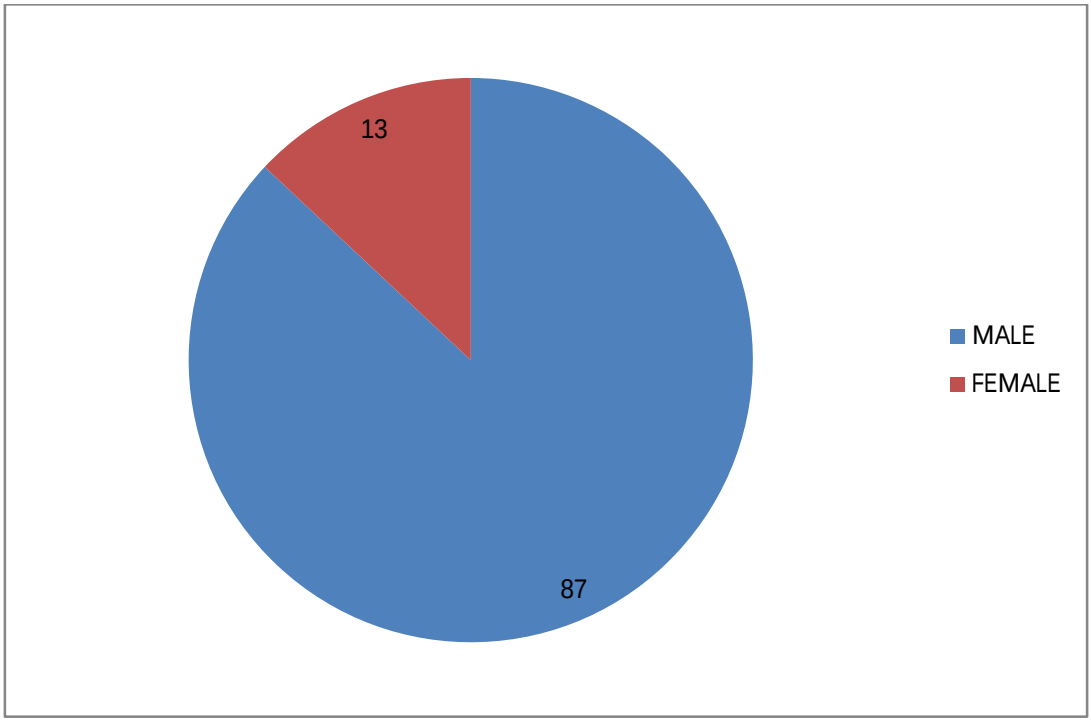

Fig.4: Distribution of Subjects According to Gender in Experimental Group

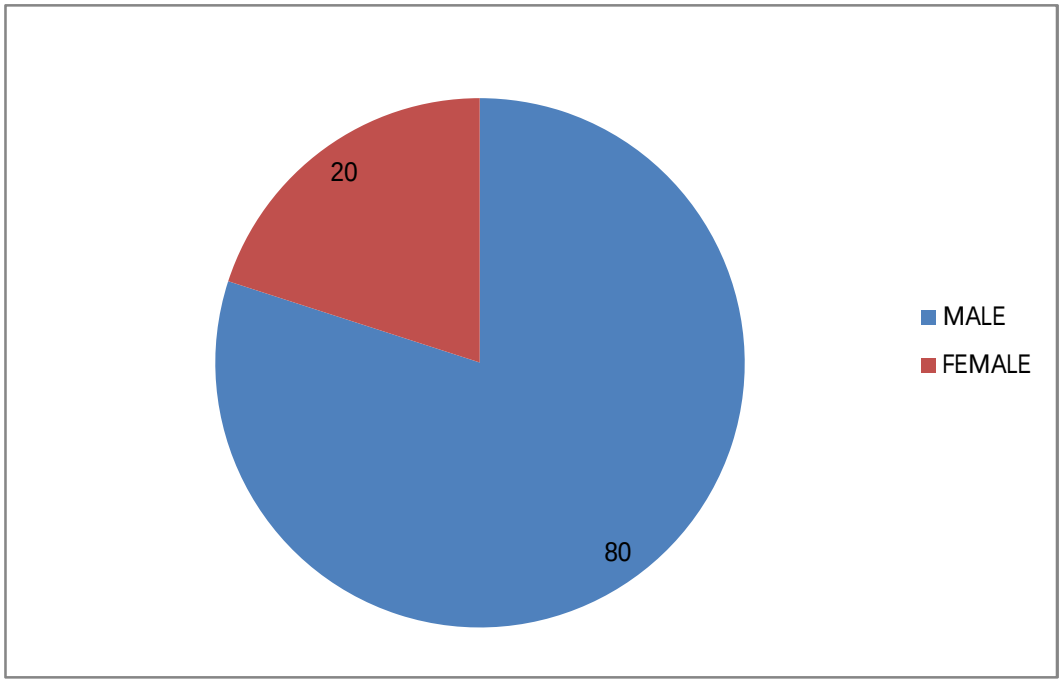

Fig.5: Distribution of Subjects According to Gender in Control Group

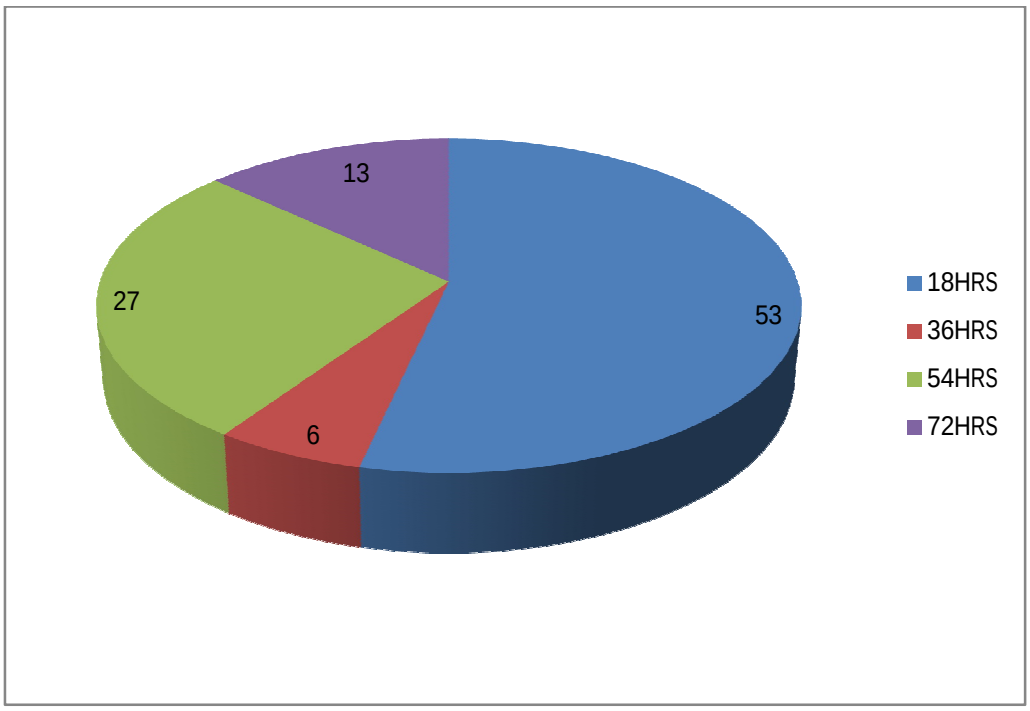

Fig.6: Distribution of Experimental Group According to Duration of Mechanical Ventilation

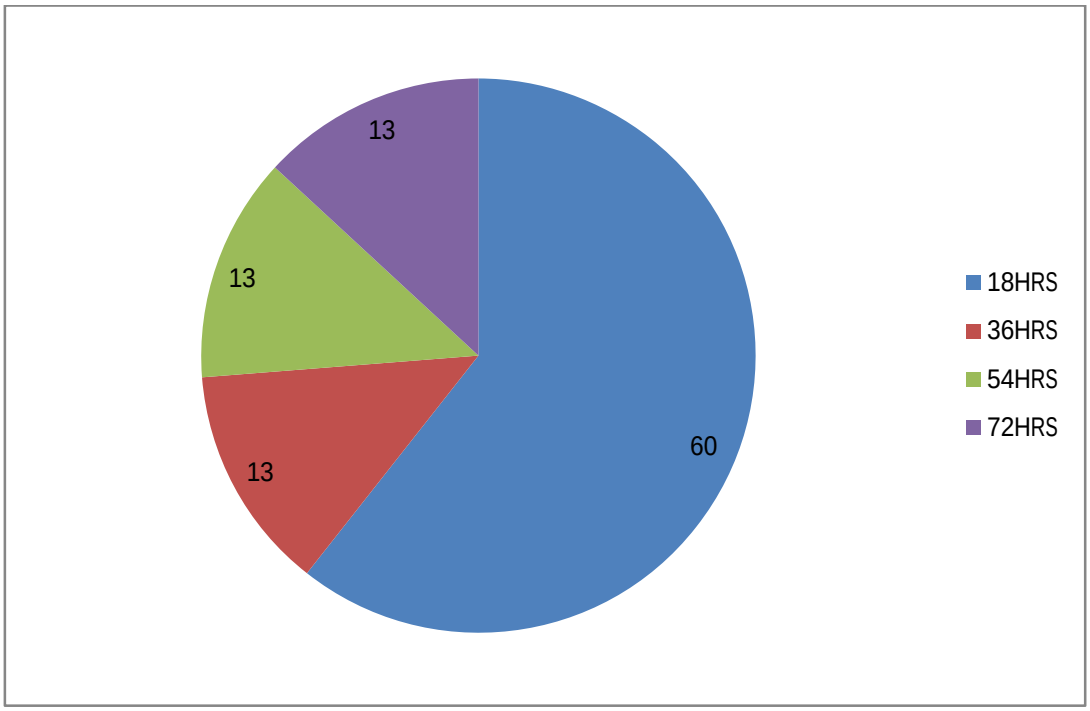

Fig.7: Distribution of Control Group According to Duration of Mechanical Ventilation

SECTION C : Description of subjects based on patient response, staff nurse response, and Level of satisfaction over communication pattern.

Table 3 : Distribution of subjects based on patient response, staff response and level of satisfaction

Sl. No	Variables	Experimental Group		Control Group	
		Mean	SD	Mean	SD
1	Patient Response	21.60	2.25	6.8	0.94
2	Staff Response	25.2	2.04	7.8	0.67
3	Level of Satisfaction	51.93	3.10	28.2	1.78

Table 3 depicts the mean values for patient response, staff response and level of satisfaction.The mean value for patient response in experimental group was 21.60 but in control group it fell down to 6.8.Like patient response, the mean value for staff response in experimental group found to be higher that is 25.2 whereas in control group it dipped down to 7.8.Similarily, the experimental group had shown high level of satisfaction (51.93) than the control group (28.2).

SECTION D: Comparison of Patient Response on Communication Pattern in Experimental and Control Group

TABLE 4: Comparison of patient response on communication pattern in experimental and control group.

Sl.No	Group	Mean	SD	't' value
1	Experimental	21.66	2.25	23.544**
2	Control	6.80	0.94	

****P<0.01**

Table 6 the 't' value is 23.544, for the mean difference in patient response score of the experimental and control group is significant ($p<0.01$).The mean taff response score of the experimental and control group were 21.66 and 6.80 respectively. It can be inferred that the patient response score is significantly higher in experimental group when compared to control group.

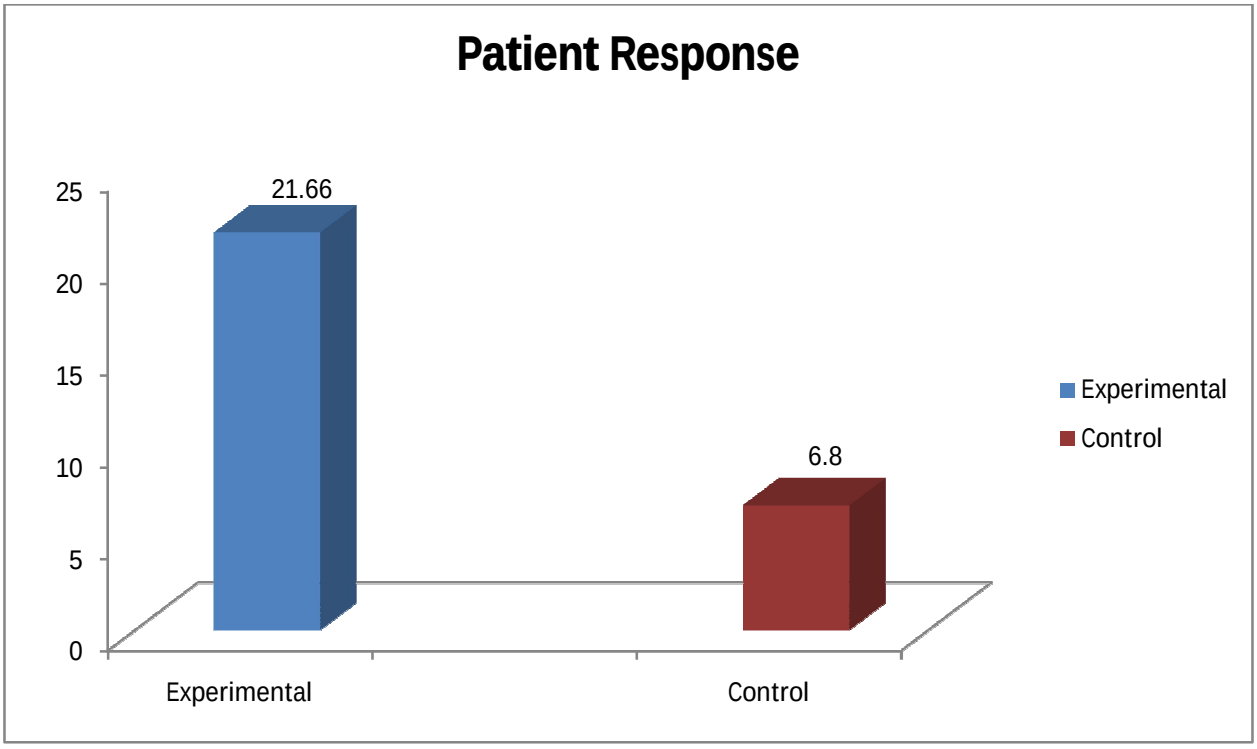

Fig 8: Comparison of Patient Response in Experimental and Control Group

SECTION E: Comparison of staff nurse response on communication pattern in experimental and control group .

TABLE 5: Comparison of staff response on communication pattern in experimental and control group

Sl.No.	Group	Mean	SD	't' value
1	Experimental	25.20	2.04	31.324**
2	Control	7.80	0.67	

****P < 0.01**

Table 7 the 't' value is 31.324, for the mean difference in staff response score of the experimental and control group is significant ($p<0.01$) . The mean staff response score of the experimental and control group were 25.20 and 7.80 respectively.It can be inferred that the patient response is significantly higher in experimental group when compared to control group.

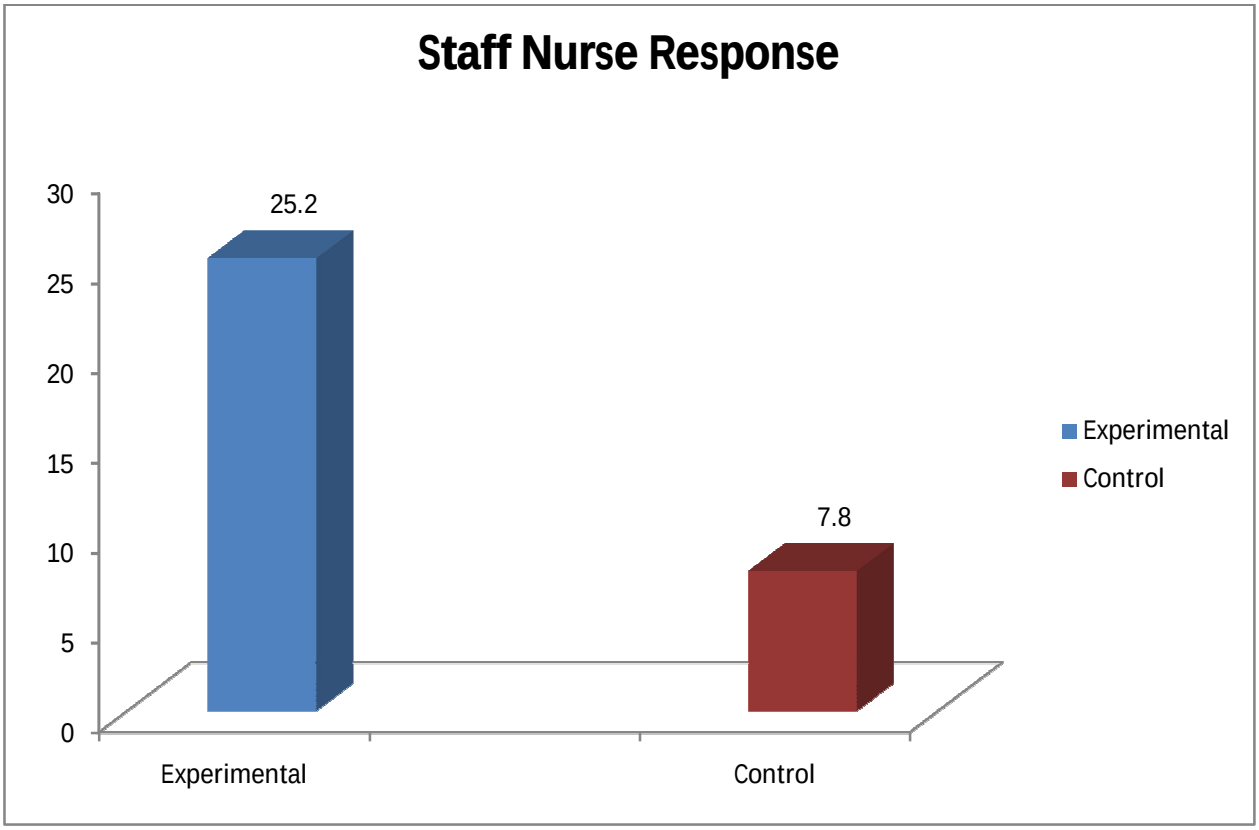

Fig 9: Comparison of Staff Response in Experimental and Control Group

SECTION F : Comparison of Level of Satisfaction on Communication Pattern in Experimental and Control Group.

TABL 6: Comparison of level of satisfaction over communication pattern in experimental and control group

Sl.No.	**Group**	**Mean**	**SD**	**'t' value**
1	Experimental	51.93	3.10	25.683**
2	Control	28.20	1.78	

**** p<0.01**

Table 8 the 't' value is 25.683, for the mean difference in satisfaction score of the experimental and control group is significant ($p<0.01$). The mean satisfaction score of the experimental and control group were 51.93 and 28.20 respectively. It can be inferred that the level of satisfaction is significantly higher in experimental group when compared to control group.

Fig 10: Comparison of Level of Satisfaction in Experimental and Control Group

SECTION G: Correlation between Patient Response, Staff Nurse Response and Level of Satisfaction over Communication Pattern.

TABLE 7: Correlation between patient response, staff response and level of satisfaction on communication pattern.

Response	**Satisfaction N=30**	**Staff Nurse Response N=30**	**Patient Response N=30**
Satisfaction	1	.965	.957
Staff response	.965	1	.977
Patient response	.957	.977	1

Table 9 shows the correlation between patient response, staff response and the satisfaction level of the patient. The Karl Pearson value reveals that there is high positive correlation among the variables ($P< 0.01$).

CHAPTER V

DISCUSSION, SUMMARY, CONCLUSIONS, IMPLICATION, LIMITATION AND RECOMMENDATIONS

DISCUSSION

The data collected for the study were analyzed statistically and discussed below based on the objectives. The sample size was 30.Out of that 15 belong to experimental group and 15 belong to control group. Among the subjects in the experimental group,47% belong to 38-57 years of age and 20% belong to 18-37 years of age group whereas from the 15 subjects in the control group 67% belong to 38-57 years of age.However,40% and 60% of samples in experimental group secured secondary, higher secondar & above respectively and in control group 33% and 67% secured secondary , higher secondary & above respectively.

This is a post test only quasi experimental research design intended to assess the effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients.

The first objective of the study was to assess the communication pattern and level of satisfaction among mechanically ventilated patients.

Mc Cabe,(2004) conducted a study on nurse –patient communication and exploration of patient experiences. A qualitative perspective using a phenomenological qualitative approach was considered in this study. 8 patients were interviewed and data were collected by using unstructured interviews. The study was concluded that the patients were found a bit difficult to communicate through non-verbal communication while on mechanical ventilator.

In this study, the mean value for patient response in experimental group was 21.60 but in control group it fell down to 6.8.Like patient response, the mean value for staff response in experimental group found to be higher that is 25.2 whereas in control group it dipped down to 7.8.Similarily, the experimental group had shown high level of satisfaction (51.93) than the control group (28.2).

The second objective of the study was to compare the effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients , who use communication board and those who do not use communication board.

The t value for score of subjects between experimental and control group for patient response was 21.66 and 6.80 respectively which is significant at 0.01 levels. The findings revealed that the patient response score is significantly higher in experimental group when compared to control group.

The t value for score of subjects between experimental and control group for staff Nurse response was 25.20 and 7.80 respectively which is significant at 0.01 levels. The findings revealed that the staff response score is significantly higher in experimental group when compared to control group.

The t value for score of subjects between experimental and control group for satisfaction was 51.93 and 28.20 respectively which is significant at 0.01 levels. The findings revealed that the satisfaction score is significantly higher in experimental group when compared to control group.

The third objective of the study was to find out the correlation between communication pattern and level of satisfaction of mechanically ventilated patients , who use communication board and those who do not use communication board

Liu, (2009) conducted a study on Basic needs and their predictors for intubated patients in surgical intensive care units.. This study was done by descriptive correlation method.

Data were collected from 80 patients in SICUs over three structured questionnaires which include demographic information, scale of basic needs and scale of communication difficulties. The result was, positive correlation was significantly found between communication difficulties and general level of basic needs (r=.53&p<.01), and another positive correlation was found between the length of stay in ICUs and the need for love and belonging (r=.25&p<.03).

In the present study, the r value for correlation between patient response, staff Nurse response and level of satisfaction was 0.01; it implies that there is a positive relationship between patient response, staff response and level of satisfaction.

Patient's reports on the communication board

Data collected qualitatively from the experimental group to know the usefulness of the communication board. Subjects were given qualitative questionnaires to evaluate the use of the communication board in terms of what would have worked and what would not have worked for communicating during mechanical ventilation.

Subjects provided both positive and negative comments related to the board. Moreover subjects provided certain suggestions for the improvement of the board. The following themes emerged from the data;

(1) A pre-printed communication board is more efficient.
(2) The things in the board that is being repeatedly asked.
(3) The suggestions for the improvement of the board.

1) A pre-printed communication board is more efficient.

Positive comments included using the board increases the efficiency and speed of communication with pre-printed text.

One patient said: much helpful, because it fastens up the process of communication. This is very efficient.

Other patient's comments reflected it as; This has most most of the things i thought to ask.

I think you have most of the keywords that people would have attended to.

The pictures in the board were really beneficial as it helped to pick the things rightly.

(2) The things in the board that is being repeatedly asked.

Patients also described, using the board helped to fulfil the emotional needs, convincing the location of pain and most importantly water, suctioning and changing the position. One patient described the benefit of the board as follows;

—This is really good because it addresses the emotions and contains the important needs like suctioning, water and position changes.

Other patient's expressed their perceptions by stating;

—I often used this board to ask water, suctioning and conveying my pain.

(3) The suggestions for the improvement of the board

Subjects provided suggestions to improve the communication board.

One patient expressed it as follows;

—I think there s just too much to absorb on either side. so curtail some of the things that are not important

Other patient's had suggested

—Some of the colors of the lettering , I'm not able to see it. please improve it

One patient suggested about the preoperative exposure to the Communication board.

—May be it could be part of the preoperative package. It contains lot of information and takes some time to familiarize with it. If you do it in this way, it could be helpful.

The other suggestion made from a patient was

“you need to have something to represent after the nature call being attended”

SUMMARY

The study is to assess the effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients at KMCH, Coimbatore.

The design of the study was quasi experimental non equivalent control group post test design. The conceptual framework was based on Kings goal attainment theory.

The sample size of the study was 30.The experimental and control group consisted of 15 subjects each. Non probability purposive sampling was used to select the patient’s. Data was collected for a period of six weeks. Investigator visited patient’s who fulfilled inclusion criteria and collected relevant data based on the objectives and data was analyzed by using inferential statistics**.**

MAJOR FINDINGS OF THE STUDY

- Patient response towards communication pattern is significantly higher in experimental group when compared to control group as $p<0.01$.
- Staff Nurse response towards communication pattern is significantly higher in experimental group when compared to control group as $p<0.01$.
- The level of satisfaction towards communication pattern is significantly higher in experimental group when compared to control group as $p<0.01$.
- There was a positive correlation between patient response, staff Nurse response and level of satisfaction as $p<0.01$.

CONCLUSION

The conclusion of the study is drawn as follows;

There was a significant improvement in communication pattern with both patient’s and staffs who received communication board than those who do not received the communication board. There was a positive correlation between patient response, staff response and satisfaction

level.

This information offers insight into the effectiveness of communication board in facilitating communication. Patient also described several advantages of communication board with pre-printed text; it increases the efficiency and speed of communication and it facilitates meeting of needs.

IMPLICATIONS

The present study findings have several implications in nursing practice, nursing education, nursing research and nursing administration.

NURSING PRACTICE

- This study helps to provide awareness towards ICU nurses in terms of resolving communication problems among mechanically ventilated patients.
- The findings of the study showed the communication board definitely facilitates the communication between mechanically ventilated patient and staff.
- The study results revealed the need of implementing the board in ICU S as a part of holistic care.

NURSING EDUCATION

- The study can be useful for students to identify the communication problems faced usually by the mechanically ventilated patient's.
- The nurse educator can give an in-service education to nurses about the importance of maintaining an effective communication.
- Teach the patient about the advantages of the board.

NURSING RESEARCH

- The study can be used to find out the effect on shortening the duration of mechanical

ventilation by promoting a more expedient weaning from mechanical ventilation.

- This study results can be utilized to conduct a study on large samples.

NURSING ADMINISTRATION

- Nursing administrator can insist the nurses to use often in mechanically ventilated patients during weaning period.
- Nurse administrator can motivate nurses to repeat the study on large sample.
- Teach the nurses about the effectiveness of interpersonal communication.

LIMITATIONS

- The study was limited to the sample size of 30, the findings cannot be generalized.
- The study was limited among mechanically
- Ventilated patients who are conscious and oriented.

RECOMMENDATIONS

- A similar study can be conducted with larger sample.
- A similar study can be repeated to understand the advantage of preoperative teaching in elective surgical patients.
- A similar study can be conducted with tracheostomy patients to know the effectiveness of communication pattern.

ABSTRACT

The present study entitled, Effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patients at KMCH,Coimbatore was undertaken during the year 2011-2012 in partial fulfillment of the requirement for the degree of master of science in nursing at KMCH,Coimbatore that is affiliated to the Tamilnadu Dr M.G.R medical university, Chennai**.**

Objectives*:** The objectives of the study were to: (1) asses the communication pattern and level of satisfaction among mechanically ventilated patients .(2)compare the effectiveness of communication board on communication pattern and level of satisfaction among mechanically ventilated patient.(3)find out the correlation between communication pattern and level of satisfaction of mechanically ventilated patients.Design*:** post test only quasi-experimental research design.***Samples*:** Thirty mechanically ventilated patients including males and females who are conscious and oriented at KMCH,Coimbatore.Non-probability purposive sampling was used to select samples. ***Conceptual framework*:** This study was based on Kings Goal attainment transaction model. ***Method*:** Initially the communication pattern and satisfaction level was checked among the control group. Later this was assessed in the experimental group. Communication pattern scale was completed by both the investigator and the staff who nursed the patient whereas the satisfaction scale was filled by the patient himself after extubation.***Results*:**There was a significant improvement of communication pattern among staffs and patients and also showed increased level of satisfaction among patients who used communication board than those who didn't use communication board. ***Conclusion*:** Communication board can significantly improve the communication pattern and level of satisfaction among patients and staff nurses.

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APPENDIX - A

Section A. Demographic Profile

- Sample No:
- Age in years
  - 18-37
  - 38-57
  - 58-77
- Gender
  - Male
  - female
- Education
  - Secondary
  - Higher secondary & above
- Occupation
  - Employed
  - unemployed
- Disease condition:

Section B. Clinical Profile

- Duration of mechanical ventilation
  - 18 hours
  - 36 hours
  - 54 hours
  - 72 hours
- Previous history of mechanical ventilation
  - Yes
  - No
- Length of ICU stay

Section C. Communication pattern scale

Patient Response

SL. NO	QUESTIONNAIRE	Not at all	Quite a bit	Moderately so	Very much
		0	1	2	3
1	Communication Pattern helps to express his/her Difficulties				
2	Communication Pattern helps to meet his/her physical needs				
3	Communication Pattern helps to express his/her Emotions				
4	Communication pattern helps to call his/her Relatives				
5	Communication Pattern helps to meet his/her health team member's				
6	Communication Pattern helps his/her to get pain relief				
7	Communication Pattern helps to meet his/her comfort needs				
8	Communication Pattern helps to express his/her Gratitude				
9	Patient co-operate well with staff members				
10*	Patient has difficulties in communication				

'*'- Reverse scoring

Staff Nurse Response

SL.NO	QUESTIONNAIRE	Not at all	Quite a bit	Moderately so	Very much
		0	1	2	3
1	Patient responds to the communication pattern appropriately				
2	Patient avoids repetition to convey the needed items				
3	Communication pattern helps to analyze the patient problem				
4	Communication pattern helps to settle down the patient				
5	Communication pattern gives you more for Interaction				
6*	Communication pattern consumes lot of Time				
7	Communication pattern helps the health team members to understand the patient Needs				
8	Feels easy to communicate to patient				
9	Communication pattern gives satisfaction				
10	Communication pattern helps to restore Confidence				

'*'- Reverse scoring

Section D.Level of Satisfaction Scale

SL.NO	QUESTIONNAIRE	Strongly disagree	Disagree	Agree	Strongly Agree
		1	2	3	4
1	I felt satisfied as I could communicate effectively while on the breathing machine				
2	I felt satisfied as my needs were rightly interpreted by care providers				
3	I felt satisfied as my wants were Fulfilled				
4	I felt satisfied as the communication pattern helped to alleviate my sufferings while on the breathing Machine				
5*	I felt frustrated as the health team members could not understand my Communication				
6*	I still feel that some of my needs are not fulfilled during breathing Machine				
7	I was satisfied with the communication pattern as my comfort needs are met				
8	Communication pattern helped To relieve the stress related to pain				
9	Nurses could identify the needs through my communication				
10	I felt satisfied as the nurses understand my communication and provided pain relief				
11	Communication pattern used breathing machine made me feel Secure				
12*	I felt anxious as no one understand my communication				
13*	I felt incapable of communicating my needs				
14	Overall I felt satisfied with communication during breathing Machine				
15*	I felt out of control as I was unable to communicate				

'*'- Reverse scoring

1) What were your most important needs to communicate while you were on the breathing machine?

.....

.....

.....

2) Which needs were not met and why?

.....

.....

.....

3) What were your barriers in communicating?

.....

.....

.....

4) What methods did your nurse used to help you to communicate?

.....

.....

.....

5) Were you satisfied with the communication method, yes/no? If no, why?

.....

.....

.....

6) How much you are satisfied with the communication board?

.....

.....

.....

7) What are your suggestions for the improvement of the board?

.....

.....

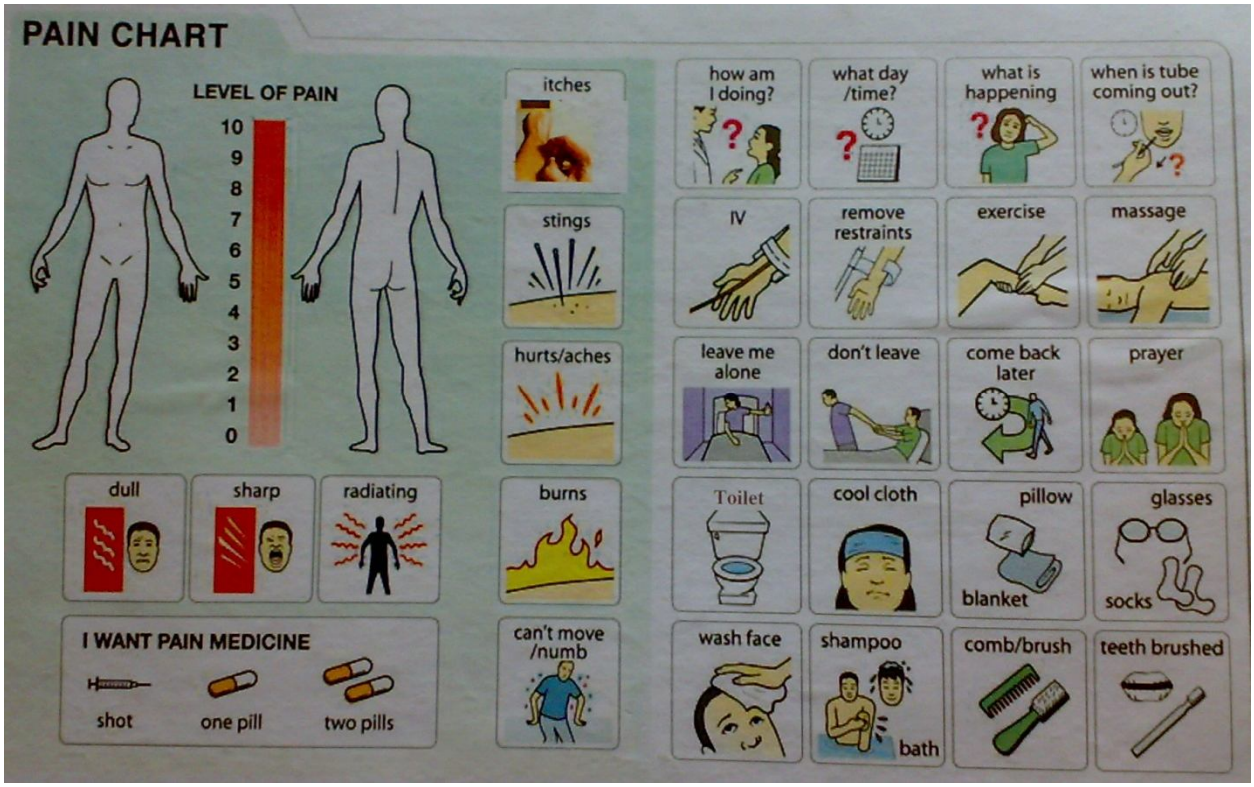
.....

APPENDIX - B


எனக்கு
மூச்சுத்திணறல்
வலியில்
அடைப்பு
நோய் அறிகுறி
பசி / தாகம்
குளிர்ச்சி/ கூடு
சோர்வு
தலைச்சுற்றல்
கோபம்
பயம்
அதிருப்தி
சோகம்
எனக்கு தேவையானவை
உறிஞ்சுதல்
உதட்டை நனைத்தல்
தண்ணீர்
ice
சௌகர்யம்
தூக்கம்
குறிஞ்சா பூல் வட்டு/ பாட்டு
திரை
பேசாதே
விளக்கை அணை/ எரிய விடு
வீட்டிற்கு
உட்காருதல்
படுத்தல்
வலது / இடது புறமாக திருப்புக
தலையை / மேலும் கீழும் அசைக்க
எழுந்திரு
நான் பார்க்க வேண்டும்
மருத்துவர்
செவிலியர்
குடும்பம்
மதகுரு
இல்லை
ஆம்
நில்
நன்றி


வலி அறிவதற்கான அட்டவணை
வலியின்நிலை
10
9
8
7
6
5
4
3
2
1
0
அரிப்பு
குத்தும் வலி
காயப்படுத்துதல் / வலி
தீ வலி
நகர முடியாமை
நான் நலமாக இருக்கிறேனா?
என்ன கிழமை / நேரம்
என்ன செய்கிறது?
பேனா/ தாள்
நரம்பு ஊசி
கட்டுகளை அவிழுங்கள்
உடற்பயிற்சி
மசாஜ்
தனியே விடு
செல்லாதே
பிறகு வாருங்கள்
வழிபாடு
கழிவறை
ஈரத்துணி
தலையணை
போர்வை
கண்கண்ணாடி
காலுறை
முகம் கழுவுதல்
குளியல்
சீப்பு / துலக்கி
பல் துலக்கி
லேசான வலி
குத்து வலி
வலி பரவுதல்
எனக்கு வலி நிவாரணி வேண்டும்
ஒரு வலி ஊசி போடுங்கள்
ஒரு மாத்திரை
இரண்டு மாத்திரை


I AM
short of breath
in pain
choking
feeling sick
hungry/thirsty
cold/hot
tired
dizzy
angry
afraid
frustrated
sad
I WANT
to be suctioned
lip moistened
water
ice
to be comforted
to sleep
I Pod
Screen
it quiet
lights off/on
to go home
to sit up
to lie down
to turn left/ right
head of bed up/down
get out of bed
I WANT TO SEE
doctor
nurse
family
chaplain
no
yes
STOP
pen/ paper
A B C D E F G H I
J K L M N O P Q R
S T U V W X Y Z .
' , ? !
SPACE
1 2 3
4 5 6
7 8 9
+ 0 -
Thank You
I Love You


PAIN CHART
LEVEL OF PAIN
10
9
8
7
6
5
4
3
2
1
0
dull
sharp
radiating
I WANT PAIN MEDICINE
shot
one pill
two pills
itches
stings
hurts/aches
burns
can't move /numb
how am I doing?
what day /time?
what is happening
when is tube coming out?
IV
remove restraints
exercise
massage
leave me alone
don't leave
come back later
prayer
Toilet
cool cloth
pillow
blanket
glasses
socks
wash face
shampoo
bath
comb/brush
teeth brushed


ഞാൻ
കിതക്കുന്നു
വേദനിക്കുന്നു
ശ്വാസം മുട്ടുന്നു
അസ്വസ്ഥനാണ്
വിശക്കുന്നു/ദാഹിക്കുന്നു
തണുക്കുന്നു/ഉഷ്ണിക്കുന്നു
ക്ഷീണിതനാണ്
തലചുറ്റുന്നു
കോപിതനാണ്
യേപ്പെടുന്നു
നിരാശനാണ്
ദുഖിതനാണ്
എനിക്ക് ആഗ്രഹമുണ്ട്
കഷം വലിച്ചെടുക്കാൻ
ചുണ്ട് നനക്കുവാൻ
വെള്ളത്തിന്
ആശ്വാസത്തിന്
ഉറങ്ങുന്നതിന്
പാട്ടു കേൾക്കുന്നതിന്
മറയ്ക്കുന്നതിന്
നിശബ്ദത
വെളിച്ചം വേണം/വേണ്ട
വീട്ടിൽപോകാൻ
എഴുന്നേൽക്കണം
കിടക്കണം
ഉത്തോട്ട്/വലത്തോട്ട് തിരിയണം
തലയും ഉയർത്തണം/താഴ്ത്തണം
കിടക്കവിട്ടുപോകണം
എനിക്ക് കാണണം
ഡോക്ടർ
നഴ്സ്
കുടുംബം
മതഗുരു
നോ
യെസ്
നന്ദി


വേദനവിവരണം
വേദനയുടെ നില
10 9 8 7 6 5 4 3 2 1 0
ചൊറിച്ചിൽ
കുത്തുന്ന വേദന
മുറിവ്/വേദന
പൊള്ളൽ
മരവിപ്പ്
നേരിയ വേദന
തീവ്രവേദന
പടരുന്ന വേദന
എനിക്ക് വേദനയുടെ മരുന്നു വേണം.
ഉൽകകൾ
ഒരുഗുളിക
രണ്ടുഗുളികകൾ
കുഴപ്പമില്ലല്ലോ
ഏതാദിവസം/സമയം എത്ര
എന്താണ് സംഭവിക്കുന്നത്
പേന/ കടലാസ്
മുഖം വൃത്തിയാക്കുക
കെട്ടുകൾ അഴിക്കണോ?
വ്യായാമം
ഉഴിച്ചിൽ
ഒറ്റക്കിരുന്നോട്ടെ
പോകല്ലേ
പിന്നെ വരൂ
പ്രാർത്ഥന
ടോയ്ലറ്റ്
നനഞ്ഞതുണി
തലയണ
പുതപ്പ്
കണ്ണട
കാലുറ
ചീർപ്പ്/ബ്രഷ്
പല്ലുതേക്കൽ

APPENDIX - D

REQUISITION FOR CONTENT VALIDITY OF THE TOOL

From

Mr. Jophy John
II year M.Sc Nursing
KMCH College of Nursing
Coimbatore-14

To

Through
The Principal
KMCH College of Nursing
Coimbatore-14

Respected Sir/Madam,

Sub: Requisition for expert opinion & suggestion for content validity

I wish to undertake a study that, "***EFFECTIVENESS OF COMMUNICATION BOARD ON COMMUNICATION PATTEREN & LEVEL OF SATISFACTION AMONG MECHANICALLY VENTILATED PATIENTS AT KMCH, COIMBATORE***". It will be of immense help to me if you would peruse the protocol & the research tool. Herewith, I am enclosing the copy of the same. Kindly do the needful.

Thanking you.

Yours faithfully

(Mr. Jophy John)

Place: Coimbatore

Date:

APPENDIX - E

CERTIFICATION OF CONTENT VALIDITY

This is to certify I have perused the research proposal submitted by Mr. Jophy John, "***EFFECTIVENESS OF COMMUNICATION BOARD ON COMMUNICATION PATTEREN & LEVEL OF SATISFACTION AMONG MECHANICALLY VENTILATED PATIENTS AT KMCH, COIMBATORE***".

I found that the methodology & instrument are appropriate.

DATE: SIGNATURE & SEAL

APPENDIX - F

LIST OF EXPERTS

- **DR. S. Madhavi, M.Sc. (N)., Ph.D.,**
  Principal & HOD of Medical Surgical Nursing,
  KMCH College of Nursing,
  Coimbatore- 14.
- **DR. N. Rajendiran MA (App. Psy)., Ph.D.,**
  Professor in Psychology & Psychologist,
  Kovai Medical Center &Hospital,
  Coimbatore- 14.
- **Prof. K. Balasubramanian, M.Sc. (N)., (Ph.D).,**
  Department of Medical & Surgical Nursing,
  KMCH College of Nursing,
  Coimbatore- 14.
- **Mr. P. Kuzhathaivel., M.Sc. (N.,)**
  Associate Professor,
  Department of Medical Surgical Nursing,
  KMCH College of Nursing,
  Coimbatore- 14.
- **Dr. Senthil Kumar MBBS, MD, IDCCM.,**
  Consultant Intensivist,
  Kovai Medical Center & Hospital,
  Coimbatore- 14.